Permit holders in Level IV counties reduced water use in May 2009 by 2.7% when compared to May 2008 and reduced water use by 30.4% when compared to May 2007

Background

On October 23, 2007, Governor Perdue directed the Georgia Environmental Protection Division (EPD) to modify surface and ground water withdrawal/production permits to achieve a 10 percent reduction in usage for water use permit holders subject to Level 4 drought response. Beginning November 1, 2007, these permit holders were required to reduce water production and non-municipal/non-agricultural water withdrawal by 10 percent compared to usage of the last winter season (beginning of December 2006 through end of March 2007). This requirement expired March 31, 2008 and was not extended because EPD determined that during the spring and summer months the Level 4 outdoor water use restrictions would result in water use reductions exceeding 10%.

Continued Monitoring of Water Use

Although the 10% reduction requirement is no longer in effect, EPD is continuing to monitor water usage to assess the effectiveness of the Level IV outdoor water use restrictions and other conservation efforts. Therefore, EPD is requiring 168 permittees in the current 55-county Level IV drought area that use more than 100,000 gallons per day to continue reporting their water use on a monthly basis. Overall, these permittees account for 98% of all water use in the 55-county Level IV drought area, almost exclusively from surface water.

Critical Infrastructure Considerations

Opportunities to reduce water consumption by power producing utilities are related to the demand for electricity. Consequently, water conservation by electric producing utility plants is constrained by the need to support energy demands. These can be reduced to the extent that Georgians work to reduce energy demand. Additionally, the power grid is designed to have certain plants operating almost continuously to provide the base load for electrical needs. The 7 power producing utility plants are considered separately from the data described below.

May 2009 versus May 2008 and May 2007 Water Use

May 2009 water use by 168 permittees using more than 100,000 gallons per day decreased by 2.7% or 17 million gallons per day when compared to May 2008. Each of these permittees was under Level IV outdoor watering restrictions in May 2008. Compared to May 2007, before Level IV watering restrictions were in effect, water use in May 2009 was reduced by 30.4% or more than 272 million gallons per day. In May 2009, 98 permittees either decreased or did not increase their water use compared to May 2008, while 68 increased water use when compared to May 2008 and 2 failed to report (Comer and Temple). However, compared to May 2007, 155 permittees either decreased or did not increase their water use in May 2009 and only 11 actually increased water use. This significant reduction in water use is attributable to the outstanding conservation efforts by Georgia's citizens and the continuation of Level IV outdoor watering restrictions. Table 1 provides a summary of water use by river basin.

					%		%
				WATER USE	REDUCTION	WATER USE	REDUCTION
	MAY 2007	MAY 2008	MAY 2009	REDUCTIONS	IN USE	REDUCTIONS	IN USE
	WATER	WATER	WATER	FROM MAY	FROM MAY	FROM MAY	FROM MAY
BASIN	USE (MGD)	USE (MGD)	USE (MGD)	2007 (MGD)	2007	2008 (MGD)	2008
Chattahoochee and Flint	535.89	381.53	369.71	166.18	31.0%	11.82	3.1%
Coosa, Tallapoosa and							
Tennessee	229.43	161.83	160.24	69.19	30.2%	1.59	1.0%
Oconee and Ocmulgee	115.53	84.25	81.12	34.41	29.8%	3.13	3.7%
Savannah	14.43	12.37	11.72	2.71	18.8%	0.65	5.3%
All Basins	895.28	639.98	622.79	272.49	30.4%	17.19	2.7%

Table 1 Summary of May 2009 versus May 2007 and 2008 Level IV Water Use Reductions by Basin (MGD)